



NOTES TRICHOMONA

MICROBE OVERVIEW

- *Trichomonas vaginalis*: pear-shaped (pyriform), flagellated protozoa; infects genitourinary tract
- Causative agent of **trichomoniasis** (trich), common sexually transmitted disease (STD)

Morphology

- Size
 - 9 x 7 micrometers
- Motile via four flagella, undulating membrane

- Rigid axostyle runs through cell from anterior to posterior end
- Contains hydrogenosomes (unique energy-producing organelles)

Replication/Multiplication

- Humans only host
 - Does not survive well in external environments
 - Multiplies when vaginal pH basic
 - **Incubation period**: 5–28 days
 - No cyst stage

TRICHOMONAS VAGINALIS

osms.it/trichomonas-vaginalis

PATHOLOGY & CAUSES

- Resides in lower genital tract of individuals who are biologically female; urethra, prostate of individuals who are biologically male → trophozoite stage (infective stage) → **transmitted sexually** → infects squamous epithelium of lower genital tract → replicates by longitudinal binary fission → **inflammatory response**

RISK FACTORS

- Sexual activity with infected partner
- Multiple sexual partners
- More common in individuals who are biologically female

COMPLICATIONS

- ↑ risk of contracting HIV due to genital inflammation

- Pregnancy
 - ↑ risk of premature rupture of membranes, preterm delivery, low birth weight
- Urethritis, cystitis

SIGNS & SYMPTOMS

- May be asymptomatic
- Individuals who are biologically female
 - Watery, foul-smelling vaginal discharge; burning; pruritus; dysuria, urinary frequency; lower abdominal pain; dyspareunia; vulvar, vaginal erythema
- Individuals who are biologically male
 - Urethral discharge; pruritus; burning after urination/ ejaculation

VISIT...

LANZAROTE
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DIAGNOSIS

LAB RESULTS

Microbe identification

- Saline microscopy (wet mount of genital secretions)
 - Characteristic organism
 - ↑ polymorphonuclear leukocytes
- ↑ vaginal pH (> 4.5)
- *T. vaginalis* assay
 - Detects species-specific ribonucleic acid (RNA); vaginal swab/urine specimen
- Nucleic acid amplification testing (NAAT)
- *Trichomonas* rapid test

OTHER DIAGNOSTICS

- Speculum exam
 - Punctate hemorrhages cervix (strawberry cervix)

TREATMENT

MEDICATIONS

- Systemic 5-nitroimidazole drugs (e.g. metronidazole, tinidazole)
 - Treat both partners

OTHER INTERVENTIONS

- Rate of transmission decreased with consistent use of condoms, spermicidal agents (e.g. nonoxynol-9)